

AMENDMENTS TO THE SPECIFICATION

On pages 1, please amend the title as follows:

Apparatus and Method for Manufacturing ~~or Working~~ Optical Objects Elements
and/or ~~Optical Forming Elements, and Such Element~~

On page 7, please amend the paragraph indicated on lines 20-22 as follows:

The invention further relates to a method for working optical elements and/or optical forming elements, ~~characterized by the features of claim 15~~ wherein an optical element is placed in or on a holder such that a surface to be worked lies substantially clear from the holder, whereupon, with the aid of a working apparatus designed for carrying out an abrasive method, said surface to be worked is worked such that at least locally, the thickness of the element decreases while simultaneously, the thickness of the element at least at the location of the momentarily worked surface part is measured and the working apparatus is controlled on the basis of the measured thickness, at least reduction thereof as a result of the abrasive method.

On page 7, please amend the paragraph indicated on lines 25-26 as follows:

The invention further relates to optical objects ~~according to claim 24 or 25~~ provided with a first surface and an opposite, second curved surface, wherein on the second surface, locally, an elevation has been provided while in the first surface, approximately opposite said elevation, a recess and/or protuberance has been provided. Additionally, the first and the second surface can be of curved design, concave and convex, respectively, and substantially of spherical, toric, parabolic or hyperbolic shape each with an apex, while the

elevation and/or the recess and/or the protuberance have been provided at a distance from the apex.

Also, please amend the paragraph starting on page 11, line 23 and ending on page 12, line 3 as follows:

In Fig. 6, schematically, an apparatus 10 according to the invention is shown, with which pre-forms 1 can be worked in a simple and accurate manner. This apparatus 10 comprises a table 11 which can be rotated by a shaft ~~11~~ 12 which is driven by a motor 13. The shaft 12 extends through the bottom of a tray 14, in which it is mounted by way of bearing 15. The table 11 extends above the tray 14 and is provided at the top side with a holder 16 as will be further described, on which, with means suitable to that end, an optical element such as a pre-form 1 can be secured, for instance with an adhesive compound/component. In or on the table 11, measuring means 17 are included with which in situ changes in form and particularly in thickness in the optical element can be measured. These measuring means will be further elucidated.

Also, please amend the paragraph on page 15, lines 12-25 as follows:

In the embodiment shown in Fig. 9, the device 17 is provided with two transmitter-receivers 28 for light, with which, through the holder 16, preferably of transparent design according to the invention, and the optical object 1 (the pre-form), light beams 29 can be transmitted and received. The light beams are at least partially reflected by the surface to be worked of the optical object 1, in the exemplary embodiment shown the second surface 3, so that, through interference of the two light beams 29A, 29B, the changes in form, in particular the changes in thickness can be determined, while moreover, the surface roughness can be determined and verified. The

Application Serial No. 10/541,003
Docket No. 294-220 PCT/US
Response to December 28, 2007
Non-Final Office Action

transmitter-receivers 28 can be pivoted about axes 30A, ~~29B~~ **30B**, so that the entire surface 3 can be covered. The transmitter-receivers 28 and the nozzle 24 are driven by the control device 26 with which, on the basis of a desired profile entered into the control device 26, for each part of the surface 3, the device 10 can be controlled and can be adjusted in a continuous manner.

Also, please amend the paragraph starting on page 17, line 28 and ending on page 18, line 10 as follows:

In a manner described hereinabove, a pre-form 1 is arranged on a holder- 16, on the transport means 52, above the measuring device 17. The starting form and position are determined and stored in a control unit 26, whereupon the transport means 52 is moved into the housing 51, as far as the first working device 18A. ~~With~~ **With** this, if required, the first surface 2 of the pre-form 1 is worked. A milling device 54 for, substantially, the desired final shape is pressed into the first surface 2, so that substantially the desired configuration of the first surface 2A is obtained. Thereupon, the transport means 52 with the pre-form 1 is moved to the second working device, in which, with the jet nozzle or nozzles 24 the, optionally, milled surface is polished and/or a recess 7 or other local change in surface is provided. Optionally, blowing means (not shown) can be provided for removing grindings, fluid rests and the like.